

**Abstract**

A disk drive self-servo writes on a storage disk. Servo bursts are self-written along a track using a transducer, a position error signal (PES) indicating repeatable runout due (RRO) for the servo bursts is determined using a reference pattern, an embedded runout  
5 correction (ERC) value is calculated based on the PES and stored in a corresponding servo sector, and then the disk drive self-writes other servo bursts.